In the Claims:

The status of the claims is as follows:

1. (Previously Presented) A formic acid fuel cell comprising:

an anode and a cathode , and an electrolyte sandwiched between said anode and said cathode;

an oxidizer in communication with said cathode;

a formic acid fuel solution in communication with said anode and containing at least about 25% (wt) formic acid; and,

an anode catalyst comprising Pd.

2. (Original) A formic acid fuel cell as defined by claim 1 wherein said anode catalyst further includes a metal chosen from the group of metals Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, W, and Au.

3. (Previously Presented) A fuel cell as defined by claim 2 wherein the metal is Au.

4. (Previously Presented) A fuel cell as defined by claim 2 wherein the metal is V.

5. (Previously Presented) A fuel cell as defined by claim 2 wherein the metal is Mo.

6. (Original) A fuel cell as defined by claim 1 wherein said anode catalyst comprising Pd is supported on carbon.

7. (Previously Presented) A fuel cell as defined by claim 1 wherein said Pd comprises nanoparticles.

8. (Original) A fuel cell as defined by claim 7 wherein said Pd nanoparticles are no greater than about 10 nm.

9. (Original) A fuel cell as defined by claim 7 wherein said Pd nanoparticles are no greater than about 5 nm.

10. (Original) A fuel cell as defined by claim 6 wherein said anode catalyst is prepared by a metal chloride reduction process.

11. (Original) A fuel cell as defined by claim 6 wherein said Pd comprises at least about 5% (wt) of said catalyst based on the total weight of said catalyst.

12. (Original) A fuel cell as defined by claim 6 wherein said Pd comprises at least about 10% (wt) of said catalyst based on the total weight of said catalyst.

13. (Original) A fuel cell as defined by claim 6 wherein said Pd comprises at least about 20% (wt) of said catalyst based on the total weight of said catalyst.

14. (Original) A fuel cell as defined by claim 6 wherein said anode catalyst has a Pd dispersion of at least about 20%.

15. (Original) A fuel cell as defined by claim 6 wherein said anode catalyst has a Pd dispersion of at least about 50%.

16. (Original) A fuel cell as defined by claim 1 wherein said anode catalyst comprises Pd and Au supported on carbon.

17-18. (Canceled)

19. (Original) A fuel cell as defined by claim 1 wherein said formic acid fuel solution contains at least about 40% (wt) formic acid.

20. (Original) A fuel cell as defined by claim 1 and further including a replaceable cartridge containing said formic acid fuel solution, said cartridge configured to be removably attached to the fuel cell whereby said formic acid fuel solution may communicate with said anode.

21. (Original) A formic acid fuel cell comprising:

an anode and a cathode, an electrolyte sandwiched between said anode and said cathode;

an oxidizer in communication with said cathode;

a formic acid fuel solution having a concentration of at least about 25% formic acid in communication with said anode; and,

an anode catalyst comprising Pd nanoparticles supported on carbon.

22. (Previously Presented) A formic acid fuel cell membrane electrode assembly comprising:

a proton-conducting membrane having opposing first and second surfaces;

a cathode catalyst on said second membrane surface;

an anode catalyst including Pd on said first surface; and

a formic acid fuel solution of at least about 25% (wt) in communication with said anode catalyst layer

23. (Original) A formic acid fuel cell membrane electrode assembly as defined by claim 22, wherein said membrane comprises a solid polymer proton exchange membrane.

24. (Original) A formic acid fuel cell membrane electrode assembly as defined by claim 22 wherein said membrane comprises a perfluorsulfonic acid ionomer.

25. (Original) A formic acid fuel cell membrane electrode assembly as defined by claim 22 wherein said anode catalyst further includes a metal chosen from the group of metals Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, W, and Au.

26. (Original) A formic acid fuel cell membrane electrode assembly as defined by claim 25 wherein said anode catalyst is Au.

27. (Original) A formic acid fuel cell fuel cell membrane electrode assembly as defined by claim 22 wherein said anode catalyst comprising Pd is supported on carbon.

28. (Previously Presented) A formic acid fuel cell fuel cell membrane electrode assembly as defined by claim 22 wherein said Pd comprises nanoparticles.

29. (Original) A formic acid fuel cell fuel cell membrane electrode assembly as defined by claim 28 wherein said Pd nanoparticles are no greater than about 10 nm.

30. (Original) A formic acid fuel cell fuel cell membrane electrode assembly as defined by claim 22 wherein said Pd comprises at least about 10% (wt) of said catalyst based on the total weight of said catalyst.

31. (Original) A formic acid fuel cell fuel cell membrane electrode assembly as defined by claim 22 wherein said anode catalyst comprises Pd and Au supported on carbon.

32. (Canceled)

33. (Original) A formic acid fuel cell membrane electrode assembly as defined by claim 22 and further including an electrically conductive material overlying said anode catalyst.

34. (Original) A formic acid fuel cell membrane electrode assembly as defined by claim 33 wherein said electrically conductive material comprises a metal mesh.

35. (Previously Presented) A fuel cell as defined by claim 7 wherein said Pd nanoparticles have a surface area of at least about 25 m^2/g.

36. (Previously Presented) A formic acid fuel cell membrane electrode assembly as defined by claim 28 wherein said Pd nanoparticles have a surface area of at least about 25 m2/g.

37. (Previously Presented) An electro-oxidation catalyst for a direct organic acid fuel cell comprising Pd nanoparticles.

38. (Previously Presented) The electro-oxidation catalyst of claim 37, wherein the Pd nanoparticles are no greater than about 10 nm.

39. (Previously Presented) The electro-oxidation catalyst of claim 37, wherein the Pd nanoparticles are no greater than about 5 nm.

40. (Previously Presented) The electro-oxidation catalyst of claim 37, wherein the Pd nanoparticles have a surface area of at least about 25 m^2/g.

41. (Previously Presented) The electro-oxidation catalyst of claim 37, wherein the Pd nanoparticles are supported on carbon.

42. (Previously Presented) A formic acid fuel cell fuel cell membrane electrode assembly as defined by claim 22 wherein said formic acid concentration is at least about 40% (wt%).